Environmental Protection Agency

§ 1042.705 Generating and calculating emission credits.

The provisions of this section apply separately for calculating emission credits for NO_x , NO_x+HC , or PM.

(a) For each participating family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Calculate positive emission credits for a family that has an FEL below the standard. Calculate negative emission credits for a family that has an FEL above the standard. Sum your positive and negative credits for the model year before rounding. Round the sum of emission credits to the nearest kilogram (kg) using consistent units throughout the following equation:

Emission credits (kg) = (Std - FEL) \times (Volume) \times (Power) \times (LF) \times (UL) \times (10⁻³)

Where:

Std = The emission standard, in g/kW-hr.

FEL = The family emission limit for the engine family, in g/kW-hr.

Volume = The number of engines eligible to participate in the averaging, banking, and trading program within the given engine family during the model year, as described in paragraph (c) of this section.

Power = The average value of maximum engine power of all the engine configurations within an engine family, calculated on a production-weighted basis, in kilowatts.

LF = Load factor. Use 0.69 for propulsion marine engines and 0.51 for auxiliary marine engines. We may specify a different load factor if we approve the use of special test procedures for an engine family under 40 CFR 1065.10(c)(2), consistent with good engineering judgment.

UL = The useful life for the given engine family, in hours.

(b) [Reserved]

(c) In your application for certification, base your showing of compliance on projected production volumes for engines whose point of first retail sale is in the United States. As described in §1042.730, compliance with the requirements of this subpart is determined at the end of the model year based on actual production volumes for engines whose point of first retail sale is in the United States. Do not include any of the following engines to calculate emission credits:

- (1) Engines permanently exempted under subpart G of this part or under 40 CFR part 1068.
 - (2) Exported engines.
- (3) Engines not subject to the requirements of this part, such as those excluded under § 1042.5.
 - (4) [Reserved]
- (5) Any other engines, where we indicate elsewhere in this part 1042 that they are not to be included in the calculations of this subpart.

[73 FR FR 37243, June 30, 2008, as amended at 75 FR 23008, Apr. 30, 2010]

§ 1042.710 Averaging emission credits.

- (a) Averaging is the exchange of emission credits among your engine families.
- (b) You may certify one or more engine families to an FEL above the emission standard, subject to the FEL caps and other provisions in subpart B of this part, if you show in your application for certification that your projected balance of all emission-credit transactions in that model year is greater than or equal to zero.
- (c) If you certify an engine family to an FEL that exceeds the otherwise applicable emission standard, you must obtain enough emission credits to offset the engine family's deficit by the due date for the final report required in §1042.730. The emission credits used to address the deficit may come from your other engine families that generate emission credits in the same model year, from emission credits you have banked, or from emission credits you obtain through trading.

§ 1042.715 Banking emission credits.

- (a) Banking is the retention of emission credits by the manufacturer generating the emission credits for use in future model years for averaging or trading.
- (b) You may designate any emission credits you plan to bank in the reports you submit under §1042.730 as reserved credits. During the model year and before the due date for the final report, you may designate your reserved emission credits for averaging or trading.
- (c) Reserved credits become actual emission credits when you submit your final report. However, we may revoke these emission credits if we are unable